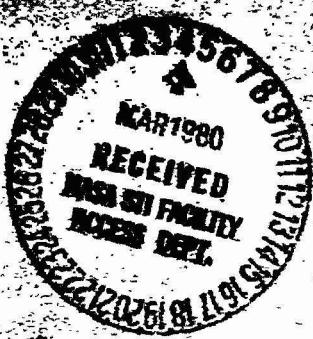


THE WORLD OF TOMORROW

Aerospace Activities for 8- to 10-year-olds



In the year 5000 things will be quite different. They will have automatic windows in the house, space cars, photographic telephones, automatic doors, etc.

Living in this day and age would be quite an opportunity.

You wouldn't have to pay your taxes, or for gas, or any kind of bills. The only things you have to pay for are the things you buy.

The children will ride a space-cycle to school. In some classes the children will have a television for a teacher, and in other classes they have robots or computers for teachers. And still in other classes there are just plain human teachers.

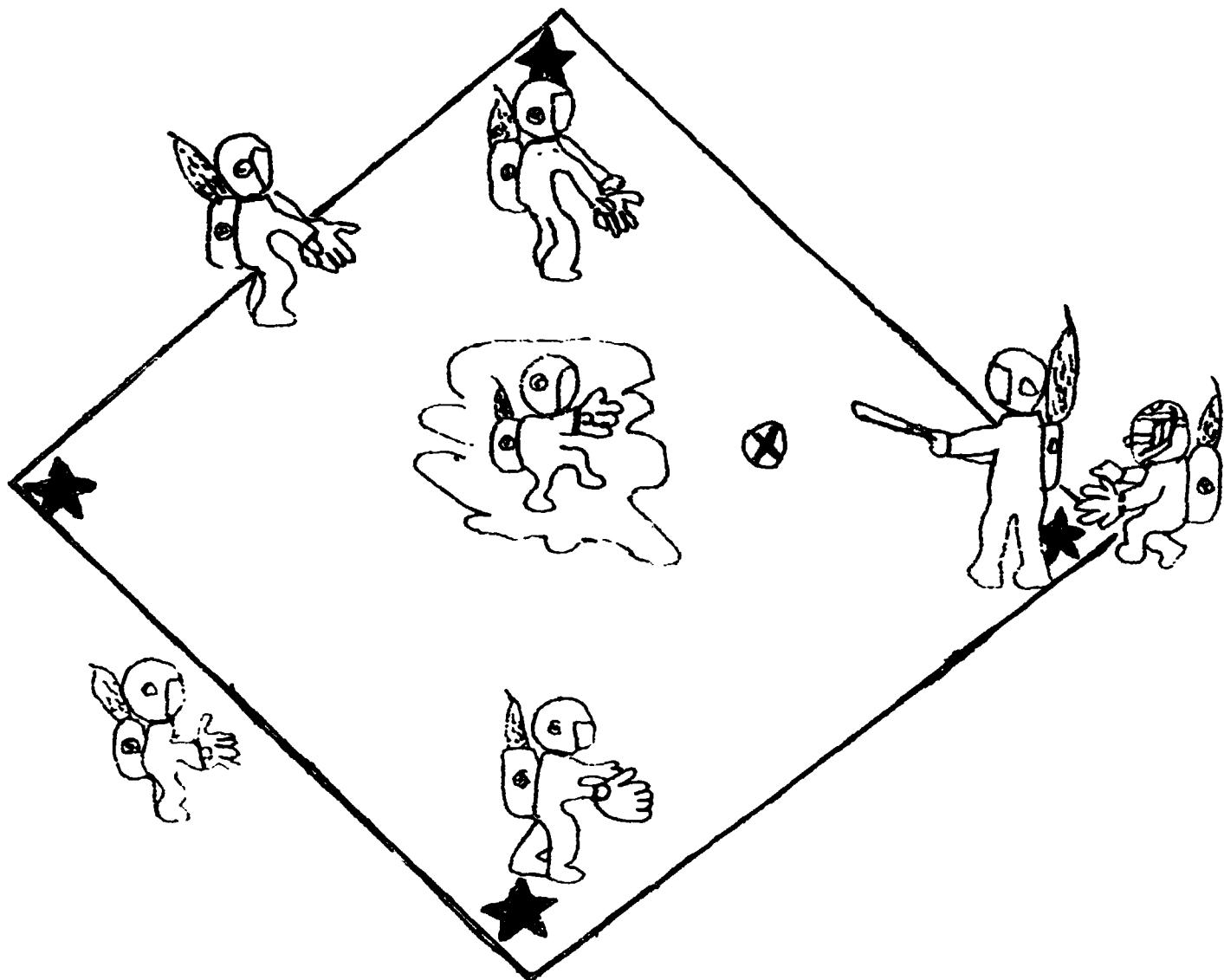
To clean up around the house they have robots as maids. One

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(NASA-EP-144) THE WORLD OF TOMORROW:
AEROSPACE ACTIVITIES FOR 8- TO 10-YEAR OLDS.
A GUIDE FOR LEADERS OF CHILDREN'S GROUPS AND
TEACHERS OF THE LOWER GRADES (National
Aeronautics and Space Administration) 70 P 63/12 47233

THE WORLD OF TOMORROW



Spacemen Playing Baseball
In space. Weebelos Pack 508.
By Barry U.

Cover
Detail of written composition,
Life in the Year 5000
Brian Gerstner
Pack 113, Hays, Kansas

Front end paper
Spacemen Playing Baseball
Barry Vanlandingham
Pack 508, Richmond, Virginia

THE WORLD OF TOMORROW

Aerospace Activities for 8- to 10-year-olds

**A guide for leaders of children's groups and
teachers of the lower grades**

Cub Scout-NASA Project

**Edmond T. Hesser, Project Director
Assistant Director, Cub Scout Division, Boy Scouts of America**

**Robert L. Untch, Project Adviser
National Director, Cub Scout Division, Boy Scouts of America**

**National Aeronautics and Space Administration
Washington, DC 20546
1978**

**For sale by the Superintendent of Documents,
U.S. Government Printing Office
Washington, D.C. 20402
Stock No. 033-000-00745-1**

INTRODUCTION

During January 1977, NASA was pleased to cooperate with the Cub Scout Division of the Boy Scouts of America in the conduct of its "The World of Tomorrow" monthly theme. In this period, 249 Cub Scout packs participated in a nationwide Aerospace Activities Project, a pilot project in which den leaders and Cubmasters conducted local programs for their Cub Scouts and Webelos Scouts. The products of these local programs were submitted to the national office of the Boy Scouts of America, North Brunswick, New Jersey, where the following accounts by adult leaders and written compositions, pictures, and photographs of models by the youngsters were selected.

NASA has been assisting the Cub Scout leadership with their aerospace-related themes for several years. It has noted the excitement and interest generated among the leaders and their charges, their feeling for the historical importance of space-age events, and the continuing enthusiasm of successive generations of Cub Scouts.

NASA's Educational Services Branch looks on the following reports as being helpful not only to Cub Scout leadership, but also to leaders of other youth groups, particularly teachers of the primary grades. For such leaders and teachers of children, the descriptions of what went on in these groups may literally spark the imagination and create the urge to undertake similar mind-stretching ventures.

In the mass of ideas submitted from throughout the nation, in addition to those included in this publication, the participants provided evidence of their excitement with the project. There was the den leader who wrote of the unexpected, unnatural, and welcome quiet of concentration among her usually rambunctious group; the acknowledgement of another of the years slipping by so quickly that her surprise at finding the boys didn't know the names Gemini and Apollo disappeared only when she reflected upon their ages; the description by another of boys who were suddenly brought to terms with the fact that they might be alive 50, or even 75, years from now.

There was the gratification of having 30 of 39 Cub Scouts choose to enter projects, all done on their own; of guiding "their researching a subject, organizing their findings, and presenting them in an imaginative way"; of watching the transformation of egg cartons into lunar surfaces, detergent bottle tops into aliens and robots, the creation of space vehicles and monsters dreamed up from odd scraps of materials; of seeing the boys' happy discovery of museums and planetaria in spite of the fierce "Winter of '77" and their sudden interest in borrowing books from school and local libraries. There was the boys' delight in "being allowed to draw what *they* wanted to draw and build what *they* wanted to build" and the leaders' appreciation of their combination of "the exact science of space technology with the wildest

imaginative projects of possible future life in space." There was the special pleasure of the boys' requests for follow-on activities, like a visit to the nearest telescope "to look out into space ourselves."

NASA wishes to thank the judges assisting the Project at the national level and the hundreds—elementary teachers and art instructors, university professors, museum and library personnel—who judged the local contests. It appreciated the opportunity to work with Mr. Robert L. Untch, National Director, Cub Scout Division, Boy Scouts of America; Mr. Edmond T. Hesser, Assistant Director; Mr. Russell A. Williams, Associate Director; and their colleagues in "The World of Tomorrow" Aerospace Activities Project. It appreciates, too, the interest of Mr. Herbert J. Rowe, former Associate Administrator for External Affairs, NASA, and the services of Ms. Muriel M. Thorne, Educational Programs Officer, who served as Technical Monitor for the Project.

National Aeronautics and
Space Administration
June 1978

PREFACE

As we move deeper and deeper into the space age, youth leaders and teachers recognize that they face a growing challenge on how to prepare young people to live in and enjoy life in such a world.

This booklet tells a story of people, leaders and boys, and how they approached an exciting new contest which challenged their imaginations and creative skills. On the pages that follow are descriptive reports by den leaders on what they did to make "The World of Tomorrow" theme successful and meaningful to their Cub Scouts. There are also photographs of the original pictures, written compositions, and models which were the selected national winners in the contest.

The purpose of the Cub Scout space project was to turn today's 8-, 9-, and 10-year-old space-age boys loose with their pens, brushes, crayons, and craft materials to interpret their ideas of what living in the future might be like. The boys were motivated by activities their leaders had planned to put fun and action in the January 1977 project theme. They were encouraged to watch for space items in newspapers, magazines, and on their favorite TV programs. Leaders asked them to recall past space events and to explore books on space for pictures and stories. At that point, they elected one or more of the three competitive areas to use in presenting their concept of "The World of Tomorrow": Written composition, artwork, or a model of some space idea or item.

We are grateful to the many leaders and friends who helped introduce and conduct this contest for thousands of Cub Scouts and Webelos Scouts. Our thanks for judging the Council, Area, and National (Regional) Winners go to: Howard Patton, retired BSA, North Brunswick, NJ, head of judging team; Jean Wojciechowski and Lillian Krall, elementary teachers, North Brunswick, NJ; John P. Gamache, Kiwanis Club President, North Brunswick, NJ; Abe Gelb, Kiwanis Club, Milltown, NJ; Mike Feigenbaum, artist, New York, NY; John F. Yanchurak and Lloyd Nacion, artists, North Brunswick, NJ; John R. Manning and Muriel M. Thorne, NASA, Washington, DC; Edmond T. Hesser, Assistant National Director, Cub Scout Division, North Brunswick, NJ; Barbara Justice, BSA, Milltown, NJ; Annette M. Hague, Cub Scout trainer, North Brunswick, NJ; Hector Hague, pack commissioner, North Brunswick, NJ; Doris Cornelius, BSA, Somerset, NJ; Marlin Sieg, retired BSA, Cranford, NJ; Walter Babson, Editor, *Scouting* magazine, North Brunswick, NJ; Don R. Gay, *Boys' Life*, North Brunswick, NJ; Josef P. Kessler, BSA, East Brunswick, NJ; Don Higgins, retired BSA, North Brunswick, NJ.

We also wish to thank the following adult leaders and Explorers for assisting with organizing the entries for judging: Anthony Gomes, Explorer Advisor, and Elizabeth Gomes, Suzanne Gomes, Michael Gomes, Cheryl Gomes, Susan DeMayo, Laura Dermott, John Lamela,

S. Kafczak, Steve Nagel, members of Explorer Post 352, Edison, NJ; and Mike Hession, Explorer Advisor, and Arlene Mencel, Maureen Donahoe, Bruce Kessler, Mark Chai, Sandy Pincus, members of Explorer Post 103, North Brunswick, NJ.

In addition, special thanks go to the following: Dr. Frederick B. Tuttle, Director of Educational Programs, and the several Educational Programs Officers at NASA Headquarters and field centers; Mr. Les Gaver, Director of NASA's Audio Visual Services, and his staff; and Rutgers University, New Brunswick, NJ, faculty members for their assistance in setting up the judging criteria for the Cub Scout-NASA Project competition.

This was a giant step in a cooperative venture to help Cub Scouts, leaders, and families be more knowledgeable about space and their life in a space age.

Cub Scout Division
Boy Scouts of America
June 1978



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FOREWORD

The book is divided into two parts. The first is devoted to the reports by the den leaders and the second to the entries of the winning 8-, 9-, and 10-year-old participants. An appendix follows.

The activities included in Part I have been listed in the alphabetical order of the authors' names. In two cases, the final product of the activity, a play written by the boys of the den, has been included; in a third instance, a Cub Scout's view of the activity written for his school newspaper, supplements the leader's account. The wide margins in this section are for teachers' and leaders' notes.

Part II presents the national winners in the three areas of competition—artwork, written compositions, and models—again in alphabetical order by the boys' names. Explanatory descriptions of the pictures and models, as written by the children, have been added. The original written compositions are reproduced.

The appendix lists the Cub Scout national winners, area winners, and participating councils and packs.

PART I.

DEN LEADERS' ACCOUNTS

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SPACE FANTASY

F. G. Baldwin
Den 7 Leader, Pack 223
Great Western Council, BSA
Pacific Palisades, California

Den 7 of Pack 223 not only had fun building the space models, but completed Achievement 5 in the Wolf (Cub Scout) book. Each model was begun with a scrap block of wood into which each Cub set and drove a nail and screw. This nail and screw were the start of the design, a toothpick sculpture on the woodblock base. Each toothpick was glued individually with fast-drying wood glue. When the project was completed, it was sprayed silver.

The winning entry was constructed of toothpicks and several round buttons. The craters and maria of the lunar surface were built up with Elmer's glue and plastic wood. The model fit into a shoe box, arranged in the lid. The bottom of the box was used as a background with black lunar mountains and a bright orange sun. When the arrangement is closed, it becomes a shoe box with the words "Space Fantasy" labeled on the silver-painted surface.

Space Fantasy it certainly is!



THE OOGALUGA CHRONICLES

Diane Boyle
Den 2 Leader, Pack 67
Suffolk County Council, BSA
Huntington Station, New York

At the first January den meeting, *National Geographic* maps of Earth, Mars, the Moon, and outer space, and pictures and articles cut from assorted children's books were displayed around the room. The boys began making papier-mâché puppet heads by covering small, inflated balloons with strips of newspaper dipped in flour and water paste. The talk, while working, centered around making the puppets into astronauts and sending them to a strange planet, which they immediately named "Oogaluga." Two of the boys decided to make their puppets into inhabitants of Oogaluga; two others decided theirs would be the astronauts exploring Oogaluga. One boy wanted to be the commander of the space ship; another wanted to do the countdown; a third planned to invent useful and necessary machines for rocket ships; a fourth wanted to push "plain old buttons."

The "written composition" turned into a cooperative puppet show to be presented to the families of the Cub Scouts at the last den meeting in January. The boys would kneel behind a bar, and, since only four boys and one leader fit behind that bar, it was decided that the play would be presented in two acts: Act I taking place inside a rocket ship, and Act II, after landing.

The boys were so "fired up" that they rushed to various supply tables previously set up: some to a workbench to make props, hills, and craters for Oogaluga, or instrument panels for the

rocket ship. Others worked on making a huge "oak tag" rocket ship to camouflage the front of the bar. Still others gravitated to covered cardboard boxes to invent "computer-robots." The pictures in the books were carefully examined to find out what *real* rocket ships looked like *inside* and what *real* planets looked like. Work became intense.

At the second meeting the boys cut costumes out of crepe paper, stapled them together, and converted them into spacesuits. Portraits of astronauts in their suits were carefully scrutinized; small, three-cent American flags were removed from the den flag chart and glued to the suits—in exactly the same position as *real* astronauts wear them. Belts, oxygen tanks, radios, were all drawn on with Magic Marker. The puppet heads were sanded and painted. While the boys finished their props, the den leaders wrote down their story outline, and then the exact words the boys felt should be said.

The puppets were completed at the third meeting, and a quick read-through of the script revealed changes and additions to be made. The boys needed backdrops—two boys from Act I hungrily devoured all pictures of instrument panels in the rocket books and drew their version; two boys from Act II drew their version of the Oogalugan landscape from landscapes of Mars in the *National Geographic*.

The presentation day arrived, and the show was on! The boys were excited,

cooperative, well rehearsed, and completely satisfied with their success, with their knowledge, and with each other.

THE OOGALUGA CHRONICLES— A PUPPET SHOW

Introductory Note:

The study and exploration of outer space have always necessitated the cooperative endeavor of many men, many groups, many bodies of knowledge. This entry, although submitted by eight boys rather than one, deserves consideration for demonstrating that ideal. Each boy composed his own part, made his own puppet and his own props. Rather than competing against one another for eight separate entries, the boys decided to work together to put on a really good show about how they might travel and explore space. Their names are listed under the cast. This puppet show was prepared and presented by eight-year-old Wolf Cub Scouts.

Act I—Blasting Off to Oogaluga

Cast: Commander	Tommy
	Schratwieser
Navigator	Mark Gutekunst
Technician	Tommy Romano
Mechanic	Paul Dircks

One at a time, the astronauts come up—as they say their lines

Commander: "Motors A-O.K."

Navigator: "All hands on deck."

Commander: "Prepare for immediate take off."

Mechanic: "All systems go below deck."

Technician: "*The meters all say: 'Go.'*"

Commander: "*Are the suits ready? Make sure the oxygen tanks are full.*"

Navigator: "*Oxygen tanks are all full, and suits are fully inflated.*"

Mechanic: "*I'll check the Life Machine. We'll need it to tell if there's life on Oogahuga.*"

Technician: "*I'll push the Plain Old Buttons first.*"

Commander: "*Yes. Activate the door button to make sure it's closed.*"

Technician: "*Check. Plain Old Buttons pushed; doors are closed.*"

Commander: "*Power on.*"

Navigator: "*Check. Power on.*"

Mechanic: "*I've directed the Life Machine towards Oogaluga and it reads, 'There is life.'*"

Commander: "*Check for weapons.*"

Technician: "*Weapons on board.*"

Commander: "*Start the countdown.*"

Navigator: "*10-9-8-7-6-5-4-3-2-1— Blast Off!*"

All: "*WHOOSH-SH-SH-SH!*"

Navigator: "*Approaching Venus.*"

Commander: "*Prepare to orbit Venus.*"

Technician: "*Buttons for orbiting depressed.*"

Mechanic: "*Life Machine says, 'Primitive life only.'*"

Commander: "*Activate rockets to break*

	<i>away from Venus' grav. . .</i>
Technician:	<i>"Buttons depressed."</i>
Navigator:	<i>"Course set for Oogaluga Oogaluga now in sight."</i>
Mechanic:	<i>"Life Machine going crazy! Life is going to attack us!"</i>
Technician:	<i>"Fuel tanks pointing to 'Empty'!"</i>
Commander:	<i>"We must land!"</i>
Navigator:	<i>"Setting down now."</i>
Technician:	<i>"All systems off."</i>
Mechanic:	<i>"I'll tell the landing crew to prepare for exploration."</i>

Act II—Arrival At Oogaluga

Cast:	Astronaut-Explorer #1 Michael Boyle
	Astronaut-Explorer #2 Ted Nelson
	Spook A David Pollack
	Spook B Teddy Smith

The two Spooks are hiding behind a hill.
The Astronaut-Explorers are just getting
off of the rocket ship.

Spook A:	<i>"Look! Over there! Prepare to attack!"</i>
Spook B:	<i>"Quick! Put the lightning in your fingers!"</i>
Astronaut 2:	<i>"Should we explore?"</i>
Astronaut 1:	<i>"Yes, but bring weapons!"</i>
Astronaut 2:	<i>"Wait! My Computer- Robot is picking something up on the other side of the hill."</i>

Astronaut 1: *"It says, 'Unknown
Creatures'!"*

Astronaut 2: *"I'll bring the Phaser."*

Astronaut 1: *"I'll bring the Gun-
Computer to shoot through
the hills."*

Spook A: *"Shoot them with lightning
from your fingertips!"*

Spook B: *"Wham!"*

Spook A: *"Wham!"*

Astronaut 2: *"Take that from my
Phaser!"*

Astronaut 1: *"And that—Bang!"*

Spook B: *"Wham! Wham!"*

Astronaut 2: *"Bang!"*

Spook A: *"Wham! Wham!"*

Astronaut 1: *"Bang!"*

Astronaut 2: *"We've had enough! Fly
the white flag of surrender."*

Astronaut 1: *"O.K."*

Spook A: *"Wham!"*

Spook B: *"Wham!"*

Astronaut 2: *"The Spooks won't stop!
What can we do?"*

Astronaut 1: *"Show them the peace sign."*

Astronaut 2: *"O.K."*

Spook B: *"Should we talk to them?"*

Spook A: *"I hope they understand
English. Hi! Welcome to
Oogaluga!"*

Astronaut 1: *"Hey! Great! They speak
English!"*

Spook A: *"It's wonderful here—we
have weird plants and trees!"*

Spook B: *"We are lighter than air.
We float around!"*

Astronaut 2: "You should see Earth!
Blue skies, good people,
delicious food."

Astronaut 1: "And Cub Scouts and Den
meetings!"

Spook A: "Sounds great! Can we
visit?"

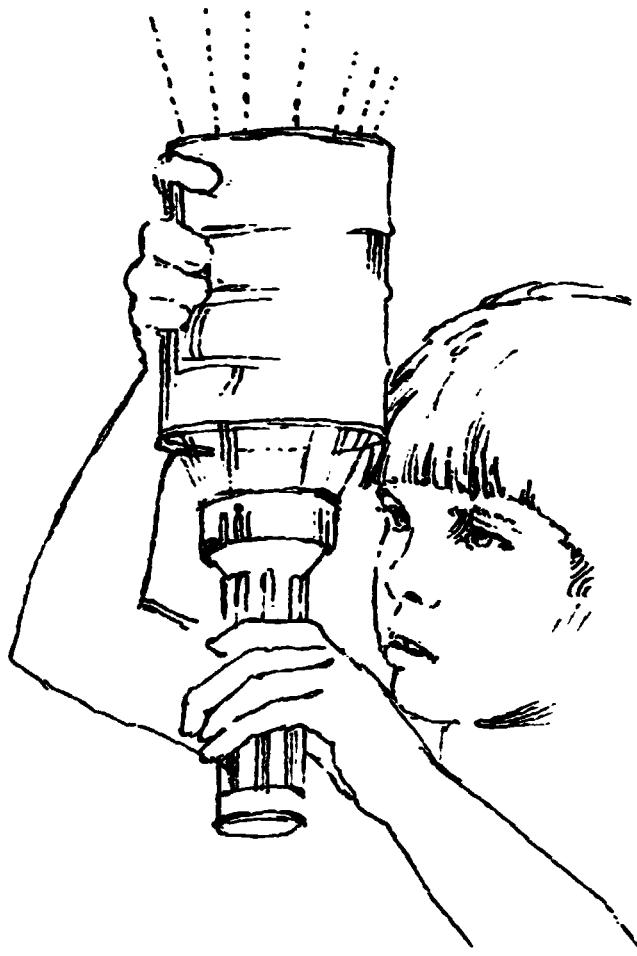
Spook B: "Yes! We want to see a Den
meeting!"

Astronaut 1: "Come on aboard!"

Astronaut 2: "Den meeting, U.S.A., here
we come!"

SPACE AND CUB PACK 150

Doris S. Caldwell
Den Leader Coach, Pack 150
Blue Ridge Mountains Council, BSA
Blacksburg, Virginia



In Cub Scout Pack 150, interest in the space theme actually began in November 1976 with a den presentation of "Thanksgiving on Mars"—a Martian narrating a paper bag puppet show which was planned and written by the den members. At the December pack meeting, a verbal announcement was made using information found in *Scouting* magazine. Soon after, each Cub Scout was given a one-page handout which contained (1) information concerning the subject areas and details as outlined by the Cub Scout Division and (2) dates pertinent to our pack for completion.

Due to severe winter weather, most dens were unable to meet regularly during January. Each Cub Scout was contacted and told to work on the project individually if he was interested in competing. The dens followed the space theme using *Cub Scout Program Helps* as a guide. Den mothers encouraged an entry in the contest and asked that completed exhibits be brought to the den meeting. There was much interest and excitement in this theme. As a result, the January pack meeting was excellent. Some of the den exhibits included:

1. Two large rockets drawn by a den with each Cub Scout taking turns adding only one line at a time; after the ship was satisfactorily completed, each Cub Scout could then

add a "decoration" or add a missing component part.

2. Constellations on a large sheet of black paper—made with gold stars and cord. Each boy in a den designed a constellation in correct perspective to the North Star; the diagram was matted on cardboard and framed with taped edges.
3. Tin-can constellations—with lights out, each Scout in a den used a flashlight to shine the constellations on the ceiling.
4. A slide was made of the Big Dipper by punching pinholes in a blank section of film and projecting the image on a screen. The legend of the Indian and Papoose was told.

For the contest specifically, the mediums with which the Cub Scouts worked were: scrap items, crayon on drawing paper, and pen on note paper. Paint, Magic Markers, glue, and other common art items were used to assemble the models.

The projects were displayed for approximately 80 persons to view at the Blue and Gold dinner.

The judges (three) consisted of a former elementary school teacher, a recent college graduate (English and history) who had worked with children and had an interest in art, and an architecture professor.

Detailed descriptions of some of the winning pack entries are:

1. *Model and Booklet of a Space Ship*
Space ship model base of shaped

cardboard covered with crumpled aluminum foil. Simplistic design exterior. Booklet includes subject page, index, outline, schematic diagrams, descriptions, and imaginative possibilities for use of the spacecraft.

2. *Model of Landing Station*
Base was formed from square box filled with shaped plaster of paris. Includes hydraulic roadway and space vehicle.
3. *Model of Space Vehicle*
Cylindrical body painted and including components of intricate plastic parts.
4. *Drawing*
Two planets (double planet—one red, one white), one moon, stars on black background.

Since the NASA contest and World of Tomorrow theme, several Cub Scouts have shown an interest in the space shuttle project and have written for and received information from NASA concerning this recent project. A den visited a nearby university observatory and used several types of telescopes. A graduate student explained the 'scopes and helped the boys locate interesting sky objects. Many Cub Scouts enjoyed "Space Odyssey Day" at the (Cub Scout) district day camp by playing games and enjoying field sports and crafts with the space theme. The most successful craft project of the week was the rocket made of lots of imagination, glue, paint, pipe cleaners, paper cups, cones, and cylinders (in that order).

USS **BIG MAC**

Nancy Held
Den 1 Leader, Pack 3880
Bay Lakes Council, BSA
Cascade, Wisconsin

Dave decided to build a model when he heard about the contest. Great! Now what to make. He had a terrible time trying to decide what and how. At first when he heard model, he thought kit! When he found out that you could not use a kit, things got a little harder. He finally decided what he wanted to make, but could not decide what to use to make it. One day we went to McDonald's restaurant for dinner with the family. Dave had a Big Mac and a cherry pie. He evidently was still thinking about the NASA contest, because all of a sudden he yelled, "I've got it." Of course no one knew what he was talking about. Dave had taken his Big Mac carton and his cherry pie carton and those of his brothers and sister and laid them out to look like a spacecraft. That's all it took, plus a little papier-mâché and paint and glue. The USS BIG MAC was finished. The name was not hard to think of, I guess. Dave said there was nothing else you could call a spacecraft made from a Big Mac carton. Dave made his model with special hinges so it would fit in a Mason shoe box. It worked great while it was still freshly made, but later it would no longer go in the box because it had become too brittle. We had to pack it in a different box.



SPACE MOVIE- MAKERS

Dorothy Houghtby
Den 3 Leader, Pack 848
San Francisco Bay Area Council, BSA
Hayward, California

The boys first decided to make a movie after one boy's older brother came and showed our den a movie he and some teenage friends had made. The subjects of the film each chose were Space Travel, Landing on Mars, A Monster Chase, Help from the Martians, and Home Again. They decided to call our movie "Boy Scouts of the Universe Unexpected Trip." The boys all agreed that when visiting another world one should always make friends, but if attacked, they would fight.

The script written, props had to be made: 1) controls for a spaceship; 2) bad robot (for our monster); 3) Martians; 4) rocket; and 5) T-shirts for a uniform. A stencil was needed for the boys' T-shirts. Each boy did a drawing. Some were eliminated because it was not feasible to make a stencil from them. The boys voted on the others and one was chosen. Each boy made a stencil from the master and dyed his shirt.

Finally, time to film our movie. We chose for our location Coyote Hills (an East Bay Regional Park). It has hills with a rocky terrain. With a home movie camera and three reels of film, off we went. To our surprise the first reel went fast and we had to cut some things out. No retakes! It took us a full day to film nine minutes.

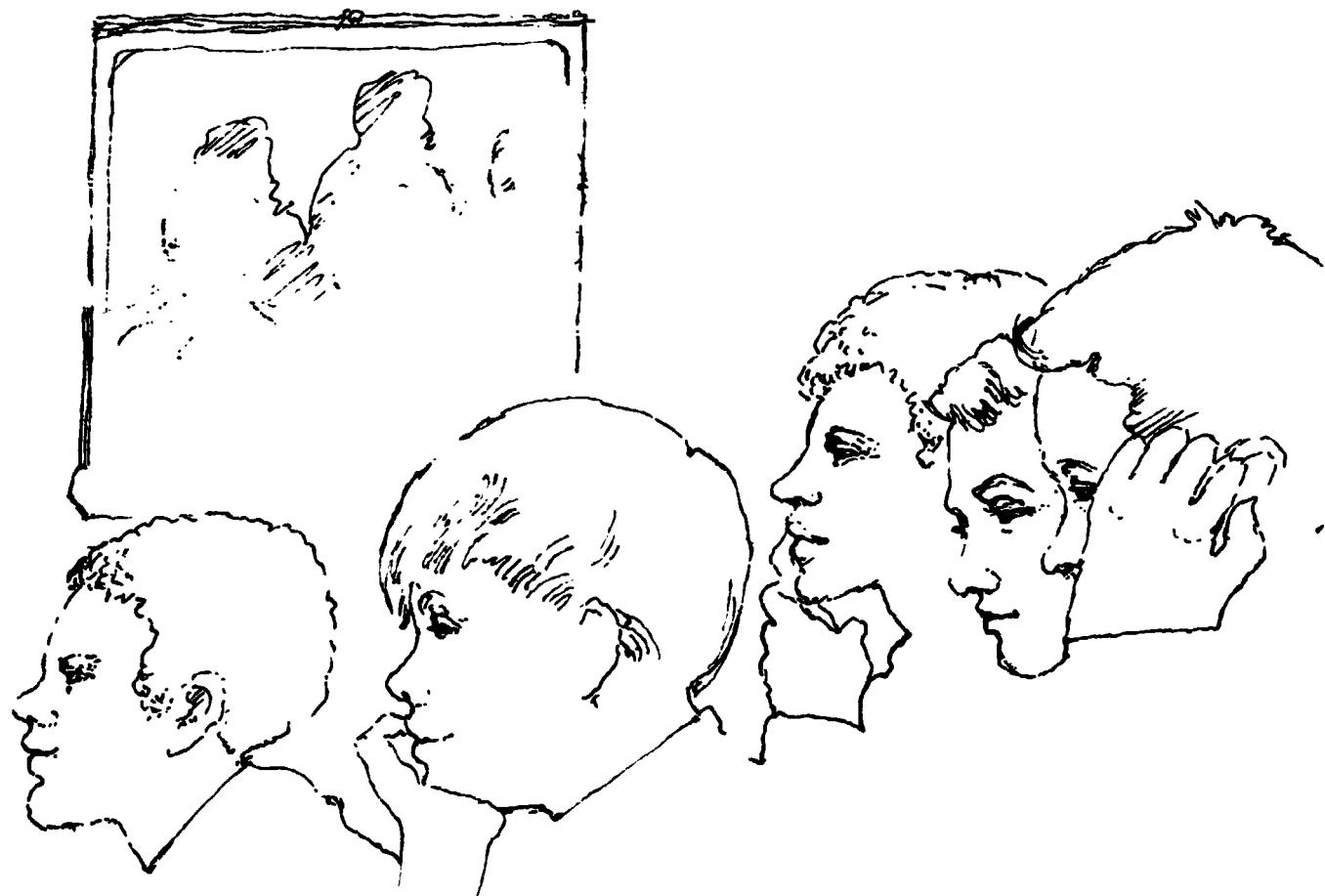
We made centerpieces of scenes from our movie for our Pack's Blue and Gold dinner, and for our part of the entertainment we showed our film. There were some very proud boys and some very surprised parents.

We were also invited to show our movie at (the Cub Scout leaders') roundtable which inspired den leaders in other packs.

Todd Woodward, one of Den 3's movie-makers, wrote the following account for the Eureka (California) Elementary School newspaper. Reprinted with permission from the *Eureka Nugget*.

"Being a Cub Scout is lots of fun! We go on lots of field trips and make projects in our den. One time, we made our own movie about a trip to another planet. It was a long time before we could film the movie because we had a lot to do. First we had to make plans for the story and we all had many ideas, but not all of them could be used. After we wrote the story, we had to find a place to film it. We decided on Coyote Hills because it is a big place and looks like the mountains on a planet. We stenciled pictures of a space ship on old T-shirts for part of our costumes, then we spent a whole meeting putting together a huge control panel. We used styrofoam, big pieces of cardboard, and bottlecaps for knobs. Two boys were supposed to be friendly space creatures. We made monster heads from styrofoam wig stands and each had one eye made out of a big plastic egg, and lots of red and gray fake hair. I was an enemy robot that knocked down the captain. I was chased away and knocked down too. The scouts on the planet had to find water and food, and guess what we found? A doughnut tree! When we finished making the film, we

ate the doughnuts. It took six hours to film the movie, but it was a lot of fun. Some parts of the story did not come out on the film, but our cub scout leader said that it would have to do, because that was a lot of hard work. We went back to Coyote Hills again, but to fly kites this time. Some kites did not fly very well. Some of us made them, and were not very happy when they didn't fly. I think they needed tails because it was so windy. Cubbing is fun!"

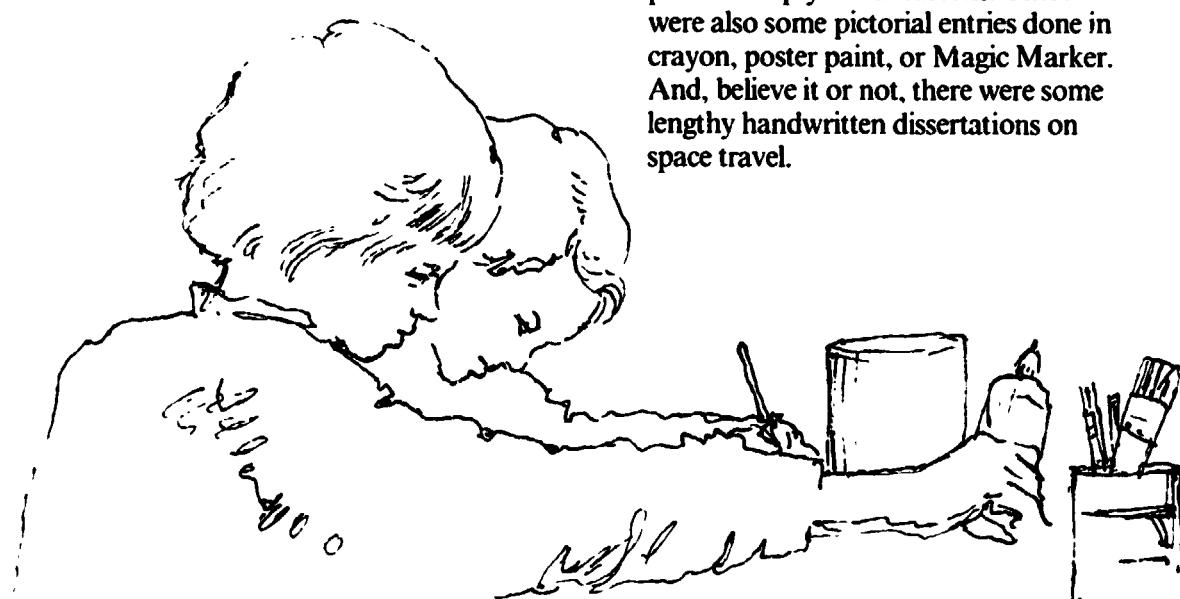


PACK 520 AND THE PROJECT

Florence Kemp
Den Leader Coach, Pack 520
Suffolk County Council, BSA
Setauket, New York

We presented the NASA project in conjunction with the January theme outlined in *Cub Scout Program Helps*, "The World of Tomorrow." The den mothers were informed of the contest and the rules of the various categories. The leaders then presented the project in each of four dens, allowing the boys to choose their own media and category in which to participate. Thus, with visual aids such as photographs of previous space missions, library materials, and even souvenirs from space centers, the projects were introduced in the dens, defined, and preparatory work and explanation done there.

Most boys chose to center their project on a model of sorts, depicting either space life or flight. The materials for the models varied greatly, ranging from Erector set parts to empty cereal cartons. There were also some pictorial entries done in crayon, poster paint, or Magic Marker. And, believe it or not, there were some lengthy handwritten dissertations on space travel.



The finished projects were presented at our monthly pack meeting in the form of our own mini-NASA contest. The various projects were exhibited according to media and category with allowance made for parental viewing and ample time for judging. Our judges were three: A Scoutmaster, an unbiased art teacher, and our own Cubmaster who does not have a son in the group to influence his decision. There was also a box for parents to voice their own selection by secret ballot. It should be noted that all projects were numbered with individuals' names on the backs of the projects, out of sight, so that no one could be influenced by the boy instead of the project.

Thus, the official NASA project entries were selected to be sent to North Brunswick. Other boys were also recognized for their excellence and awarded prize ribbons for each of the three categories, plus the Most Popular Project as selected by the parents' secret ballot. Incidentally, two of the three winners coincided with the parents' ballot. How's that for good judging?

The idea of space and the future is alone a great stimulus to minds of both young and old. Our boys were very impressed that the contest was indeed assisted by the National Aeronautics and Space Administration itself, and were inspired to put their ideas and thoughts to paper in hopes of somehow influencing the future of America in the world of tomorrow—and being part of it.

ENTHUSIASM AND CREATIVITY

Emmajean Kohrer
Den Leader Coach, Pack 303
Greater Niagara Frontier Council, BSA
Tonawanda, New York

The boys in Pack 303 thoroughly enjoyed the 1977 Cub Scout-NASA Project. Quite often, den meetings center on specific, preplanned activities, such as craft projects and advancement requirements. With "The World of Tomorrow" theme, however, the boys' imagination and skill were released. Enthusiasm and creativity seemed to overtake our once restless Cubs, and the zealous transformation of household junk into space vehicles was a joy to behold.

This Cub Scout-NASA project was especially educational for our boys. In planning creations for the future, Cubs had to consider what had already been accomplished in space. While they were familiar with Moon walks and Viking crafts to Mars, many boys were unaware that space programs were responsible for such things as communication and weather satellites. The enthusiasm generated by this project, coupled with the boys' desire to know, has encouraged many of our youngsters to seek out books and articles about space for independent reading.

The Cub Scout-NASA Project generated interest and creativity; it was responsible for enlightening the boys about space. Most importantly, though, it encouraged independent thinking. As our head judge Orrin Christy remarked, "all exhibits demonstrated thoughtfulness and imagination and showed the futuristic thinking of the participants."

In addition, the contest itself was set up very fairly. Cubs who like to draw had a special category; those who like to write had a category, too. Being presented with a choice enabled each boy to compete with confidence.

An interesting result of this project is that from having a local astronomer as one of our judges, our pack has received an invitation to visit his observatory. We are anticipating an enjoyable and enlightening tour as soon as our Buffalo weather improves!





ROCKETS

Richard H. Mazza
Den Leader, Pack 888
San Gabriel Valley Council, BSA
Covina, California

The rewards of this experience were mine and the boys in our pack who participated. I explained all the rules to them and gave each a chance to pick his own project.



First we went on a field trip to McDonnell Douglas so the boys could get some ideas and a feeling for the project. Next, they all made model rockets and were so excited at the way they turned out that we decided to have a rocket derby. So I built a launch pad and we all went to Cal-Poly Pomona (college campus) where we had a super time firing rockets most of the day.

Next we displayed all the NASA projects at our January pack meeting (the theme was space). At that point, I took all the projects home with me, and the following week when I set up our Scout Week display at a bank in Covina, we used all the boys' projects for part of our display. We received quite a few compliments from residents and bank employees, and the San Gabriel Tribune had an article making reference to our display.

From the bank, I moved the display to the local school where we hold our pack meetings and again received many compliments from teachers and students.

We had our Blue and Gold dinner February 23rd, and at that time we chose a panel of teachers to judge our projects. All the boys who entered a project received a participation ribbon and the winners received small trophies.

So you see, we were the lucky ones to be rewarded by this project. It turned out to be the most exciting project our pack has ever had, and it's something our scouts will remember for a long, long time. Thanks.



SPACE AGE ACTIVITIES

Fran Oland
Den 1 Leader, Pack 126
Pheasant Council, BSA
Aberdeen, South Dakota

"The World of Tomorrow" was the theme for Cub Scouting for January. This was my first month as a den leader. Not knowing the boys in my den, I chose to plan the month's activities. As resource material I used *Boys' Life*, December '76, *World Book*, and *Cub Scout Program Helps 1976-77*.

We looked at rulers and drew attention to the unused side which has many more lines. New words such as millimeter, centimeter, and decimeter were introduced. We had these measures drawn on the walls and the floor with chalk. With the aid of adults, the boys measured one another's height, hand span, arm spread, shoe length, stride, etc. We talked about Canada and the United States being the only countries not using the metric system and that soon we too would change to this system in a "tomorrow" which we would be part of.

We began our space projects by discussing the overpopulation of the Earth. The boys made sandwiches mixing ground beef with "extender" to emphasize how food needs to go further to feed the people of our planet. We thought perhaps that overcrowding would force us to use space and other planets.

While traveling in space, we thought the stars would help us. Most of us didn't know how to locate the Pole or North Star. We had a diagram of the Big Dipper showing the two stars which point to the North Star. We had pinhole planetariums to demonstrate this.

We created our rockets of paper tubes; the stabilizer fins were cardboard which were dovetailed into the tubes. We discovered that half circles could become nose cones for our rockets. The purpose of painting the rockets was to emphasize more of the hand skills rather than the technicalities of rocketry. The rockets were displayed at our monthly pack meeting, and the three winners were displayed in the window of a toy shop on Main Street.

We close our meetings with a treat. On one occasion a Cub brought Milky Way candy bars. This was a great opportunity to enjoy something sweet and talk about the Milky Way Galaxy, of which we are a part. We also had Tang as a drink which was the "drink of the astronauts."



JOURNEY TO THE PLANET YOB

Suzi Torres
Den Leader, Pack 499
South Florida Council, BSA
Hollywood, Florida

Our research began in December at the South Florida Scouting Show where we were treated to a great display presented by NASA. We brought home our booklets and pamphlets, read, and discussed them.

In January we went to Buehler Planetarium, to the library, and to the Mini Expo to do our thing.

I learned about the *High Frontier*, a new book about projected colonies in space spheres. I showed this material to the boys. We discussed life within these spheres and did experiments and games relating to gravity, centrifugal force, trajectory, etc. We made gold star constellations on blue paper for place mats, invitations, and place cards for our Blue and Gold dinner.

We made our rocket from paper boxes. It was painted with yellow enamel and blue trim. It had a door in the back, a control panel inside, and headset (spray can tops and wire) for communications. The boys made their space helmets and alien costumes.

The boys wrote the play themselves, and rehearsed and rehearsed until it was polished for presentation at the Blue and Gold banquet.

At each meeting, I reminded them of the NASA contest.

By this time, I, the den mother, was weary and my home was wall to wall space material, but the boys' delight and enthusiasm kept me going.

One boy brought in a copy of "The Space News" that he had printed himself. Another boy made our space control station. Another boy shared a space scrapbook that he had made.

It would take 5,000 words to describe the many projects and games, and the great fun the boys had with this theme. The experience was greatly rewarding for me, and our family is looking forward to a vacation at the Cape and a tour of the Kennedy Space Center.

Thank you NASA for your inspiration.

TITLE: Journey to the Planet YOB
(that's boy spelled backward)

Robert: "*Fuel*"

-Cub Control

Dennis: "*Fuel, AOK*"

-Astronaut

Robert: "*Pressure*"

Dennis: "*Pressure, AOK*"

Robert: "*Temperature*"

Dennis: "*Temperature*"
 "*AOK*"

Robert: "*Oxygen*"

Dennis: "*Oxygen, AOK*"

Robert: "*Peanut Butter*"

Dennis: "*Peanut Butter,*
 AOK"

Robert: "*Ready for*
 countdown"

pause

All Boys: "*10-9-8-7-6-5-4-3-2-1*"

Sound effects

Robert:	<i>"We have ignition! We have lift off! Lift off looks good! All systems go!"</i>	Sam:	<i>"Can we be Cub Scouts?"</i>
Paul:	<i>-Astronaut Captain "Captain's log Stardate 1, 9, 7, 7. It's been a fabulous voyage aboard the Boypower 9. Outer space is so beautiful. Our ship has functioned well. The boys did a good job building her. It was a lot of work to prepare for this mission, but soon we will be landing on the planet YOB."</i>	Max:	<i>"Will you help us?"</i>
John:	<i>"Prepare for landing. Ready for touchdown. Touchdown!"</i>	Astronauts:	<i>"Yes. Just do your best."</i>
Astronauts	<i>Come out of ship. Aliens come on stage, turn and face each other. YOB aliens are wiggly, undisciplined creatures with high wiggly voices.</i>	YOB Creatures:	<i>"We'll do our best!"</i>
John:	<i>"There is life on this planet!!!"</i>	YOB creatures	<i>stop wiggling, stand tall and give snappy Cub salute.</i>
Sam:	<i>"What are you things?"</i>		END
-YOB			
John:	<i>"We're Cub Scouts!"</i>		
Billy:	<i>"What is Cub Scouts?"</i>		
-YOB			
Dennis:	<i>"We're boys who have more fun."</i>		
Max:	<i>"What's fun?"</i>		
-YOB			
Paul:	<i>"Doing your best together learning, building, playing, and giving goodwill."</i>		

THREE DENS AND THE FUTURE

Donna Whalen, Den 4 Leader
Briann Muscianese, Den 5 Leader
Darrell Von Richthofen, Den 6 Leader
Pack 39, Dutchess County Council, BSA
Dover Plains, New York

Den 4. Our den had fun learning about satellites, different types of rockets, and imagining what life would be like in the future. The boys did not even realize what a satellite was until we read about them in your pamphlets. They learned that our own world may someday extend far beyond the Earth.

Our boys received credit toward their badges for making something useful. We made rockets, satellites, and future homes.

Sean O'Hearn's model of future homes is made of plywood and "eggs" from L'eggs stocking containers.

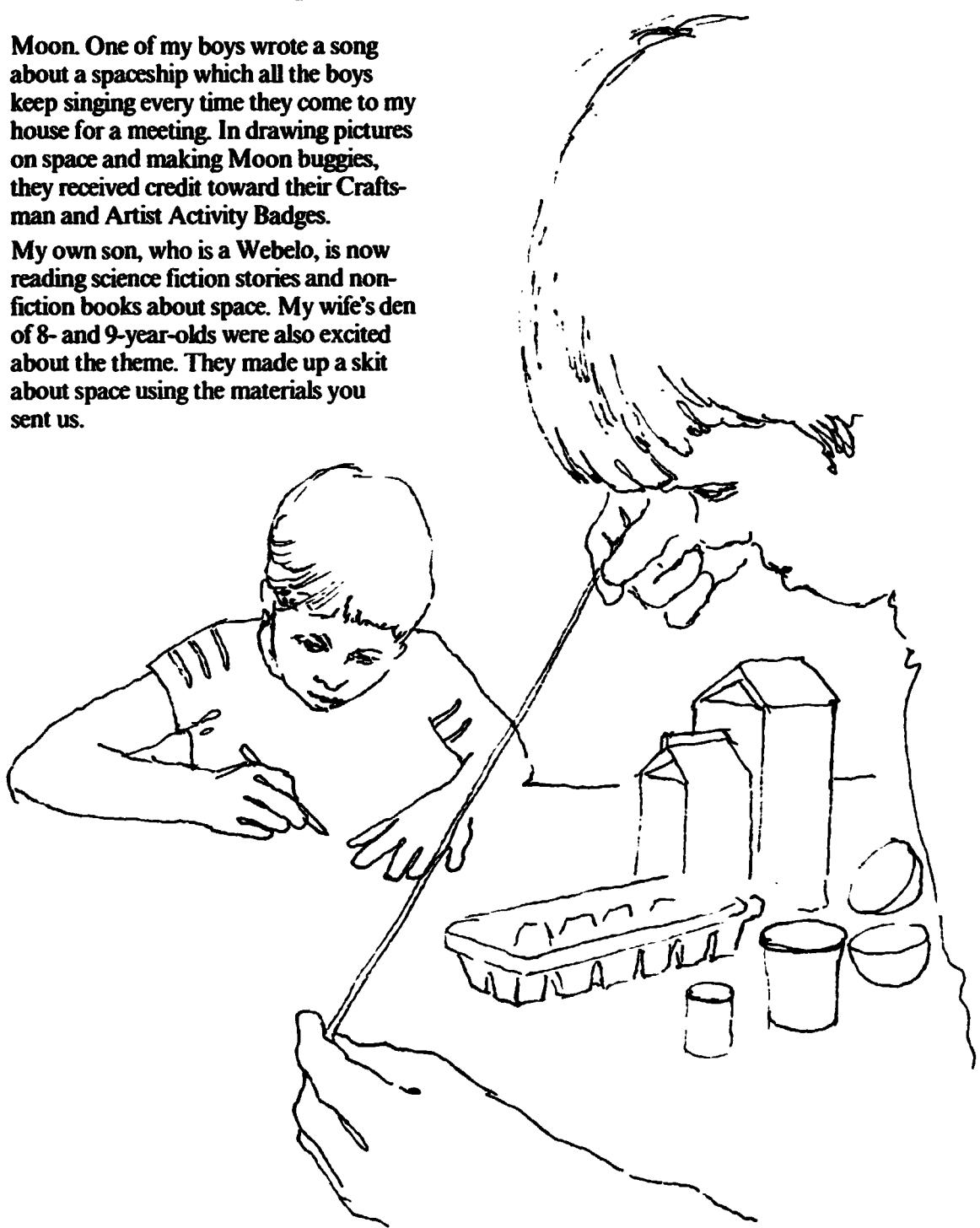
Den 5. Our den had fun imagining what life in our town would be like in the future. We collected milk cartons, paper cups, egg cartons, and tin foil and made a Dover Plains of the future. The only problem with our city is that none of our buildings would fit in (the required) shoe box!

My son did win the writing contest though. It's hard to get boys to write, but this contest helped motivate them to write stories, poems, and letters.

Den 6. Although the Webelos dens do not usually follow the monthly theme, my den decided to participate in this contest because they were excited about the concept of space. This theme helped the boys think about the future. From their imaginations came pictures of future cities, future rockets, and men on the Moon. They made Moon buggies which helped them to realize that we need a special kind of transportation on the

Moon. One of my boys wrote a song about a spaceship which all the boys keep singing every time they come to my house for a meeting. In drawing pictures on space and making Moon buggies, they received credit toward their Craftsman and Artist Activity Badges.

My own son, who is a Webelo, is now reading science fiction stories and non-fiction books about space. My wife's den of 8- and 9-year-olds were also excited about the theme. They made up a skit about space using the materials you sent us.



PART II.

CUB SCOUT PROJECTS

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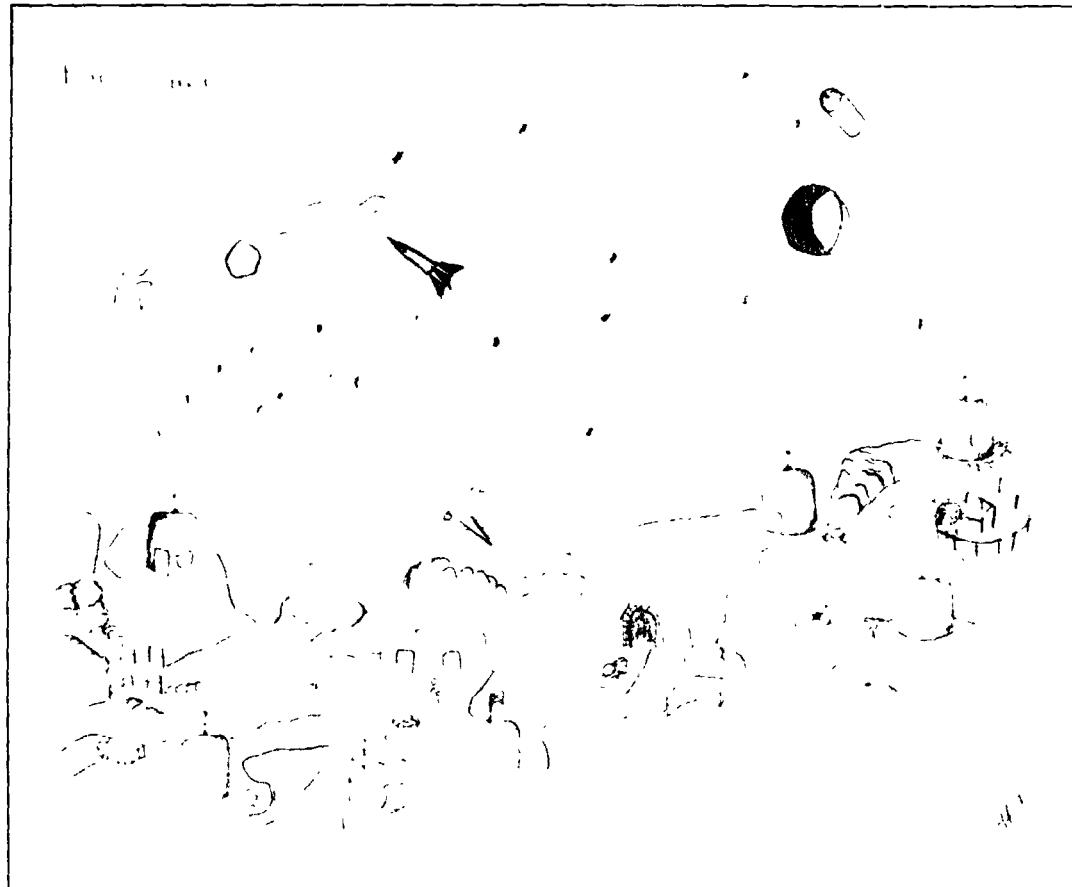
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Planet: Mars

Geoff Ahmann
Pack 604, Scotts Valley, California

"Around ten centuries from now the Earth will be so populated that some people will have to move into space. By then we will know how to live on Mars. This picture is showing life on Mars. It is not very populated. People live in glass domes. They dug way down and found water. It was clean. There is everything you need to live on Mars, but atmosphere. So they made one chemically."

Pencil



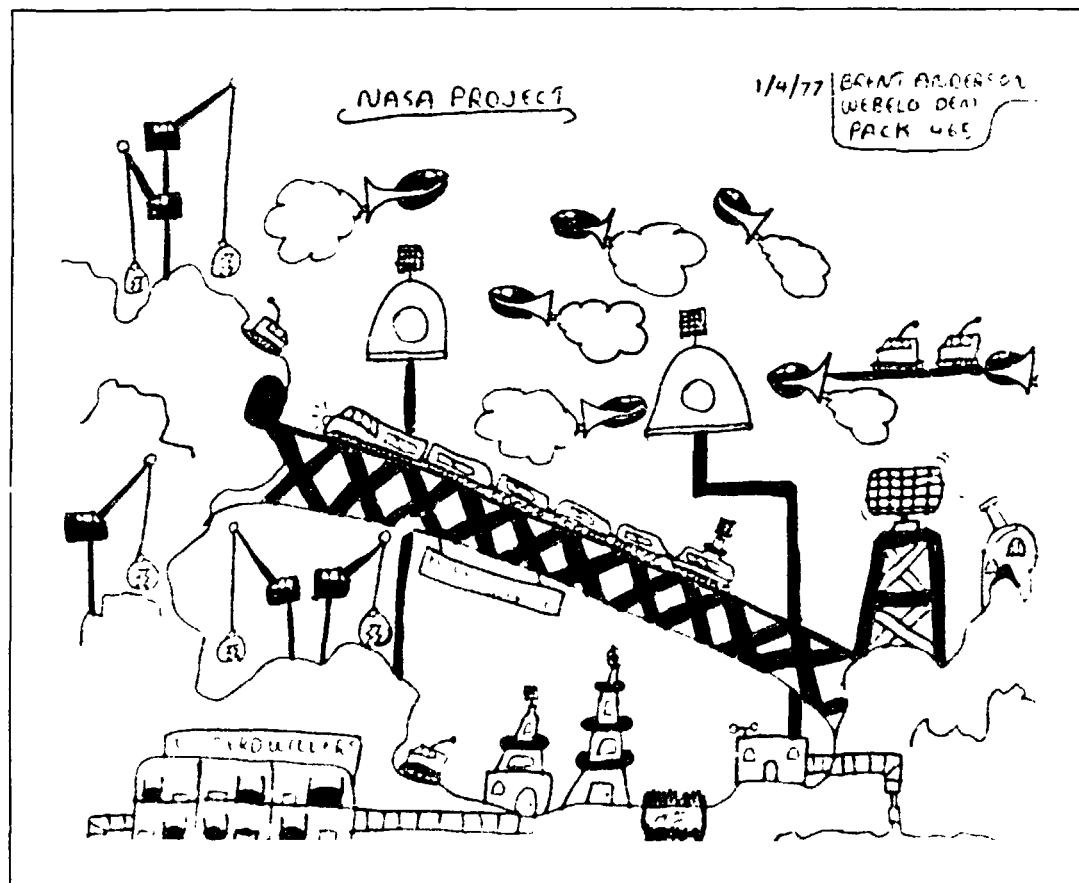
"In my drawing, I was trying to express my feelings in a picture of our world hundreds of years from now. I was showing the people's homes and their businesses, Their transportation and stations.

"All I wanted to show was what I thought it would look like in the future."

Green felt-tip pen

Future World

Brent Anderson
Pack 465, Largo, Florida



A Lunar Landing

Henry Guaricello
Pack 34, Franklin Lakes, New Jersey

"I was describing the scene of the landing of a lunar module on the moon. I tried to make it look 3D. It's my idea of what the first landing and what the moon looked like"

Construction paper. The picture opens like a pop-up book so the Command Module, which is attached to a wire, is over the surface of the Moon.

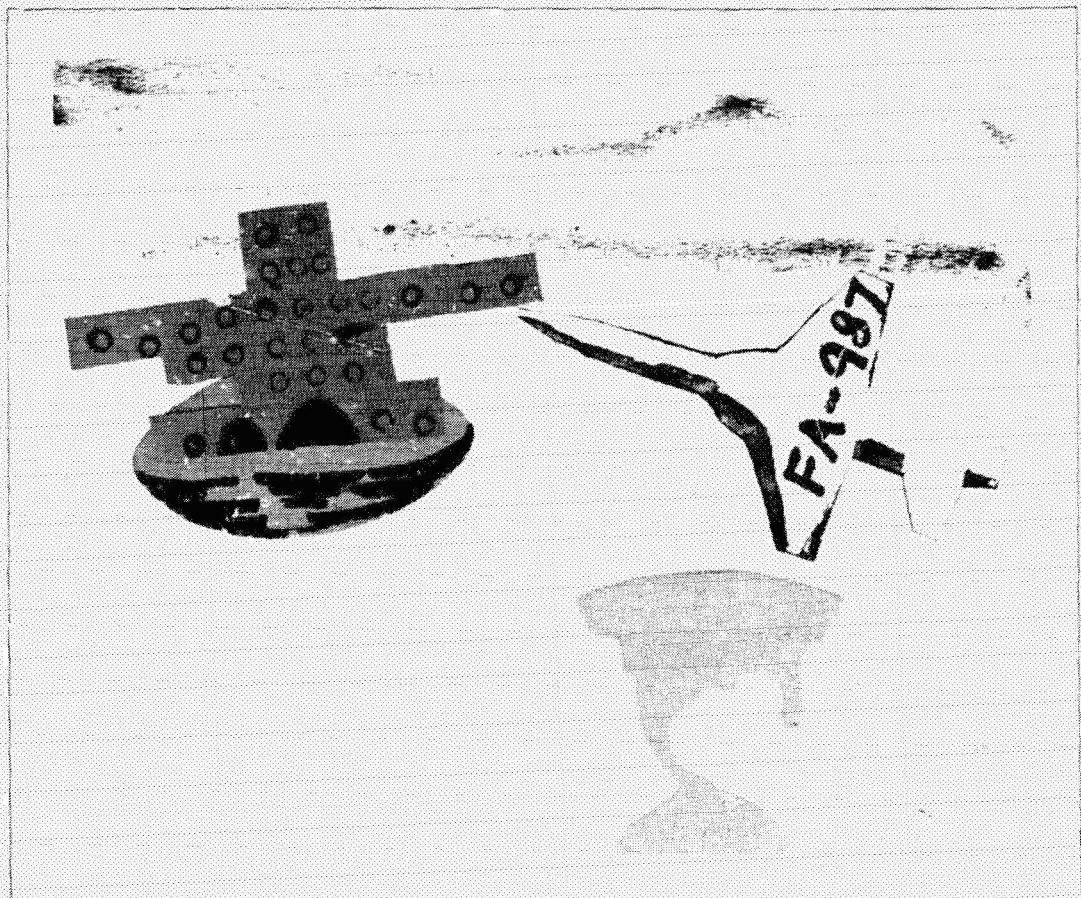


"In my picture the people are going from the earth to their space house. They have traveled from their house to the earth to buy their food and clothes from the shopping center. I think it would be fun to live in space."

Construction paper on watercolor paper

Returning Home, 2,000 A.D.

Carl Lauto
Pack 53, New Orleans, Louisiana

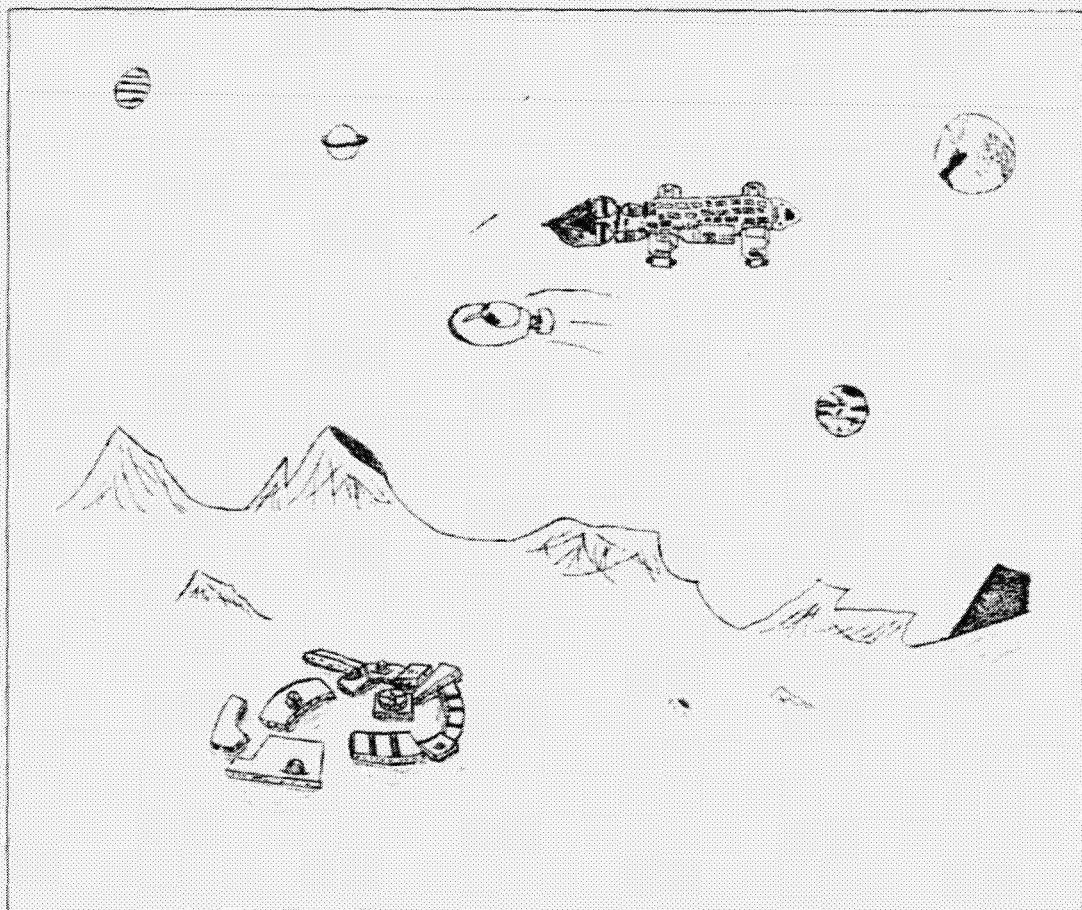


Joining Together

Danny Masterson
Pack 112, Westchester, Illinois

"When I drew my picture for the 1977 Cub Scout-NASA project, I was trying to say how nice it would be if peoples of all countries could live and work together in peace. I hope we won't have to go to the moon to have that happen."

Pen and ink on manila paper

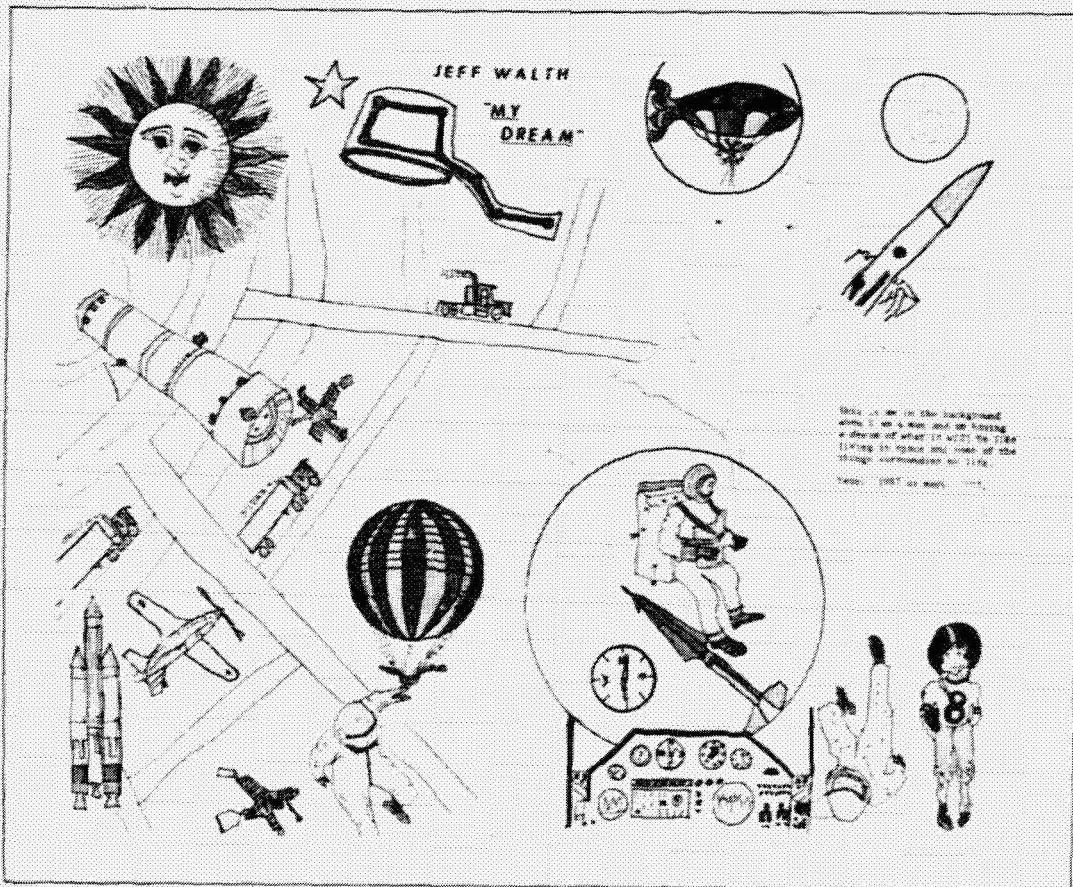


"I included some of my favorite things. Football: my favorite sport. Trucks: my Dad drives a truck."

Colored pencils, crayons, felt-tip pens

My Dream

Jeff Walth
Pack 126, Aberdeen, South Dakota



Dear Mom & Dad,

Jeffrey Cox
Pack 153, Bedford, Virginia

Jeffrey Cox
P.O. Box 5
Bedford, Va. 24523
Jack 153
Scout District Council #599
The Lodge 111, Council #599

Feb 8 1977
Somewhere Mars

Dear Mom - Dad,
Remember the rocket Mike,
Peter and I were building
for the Cub Scout project?
Mike & I pushed the blast-
off button before we were ready
and here we are on Mars.
I'm sorry we didn't get a
chance to say good-bye and
I hope you didn't worry about

We really enjoyed the trip
but we did get a little hungry.
Mike left his peanut butter
and graham sandwiches on the
lunch tray so I ate sand-
wiches while you prepared
sandwiches and cookies with
him.

A few little green men are real
nice to us. They even let us
sleep in their bed which
is really just a hole in the
ground. The only food is
something that looks like a huge

-2

grasshopper and taste like green leaves. I guess that's why the people are green.

There are little green girls here, too. Mike wants to bring one home with him but he's not sure his Mama would like her.

We'll be coming home before long. Keep the C.B. radio turned to channel 1 and we'll call you when we get close enough. Meet us at Smith Mt. Lake with plenty of hot dogs and hamburgers. That's where we'll splash down.

Tell all the Cub scouts hello for us.

Love

Jeffrey

Emergency in Space

Scott H. James
Pack 467, Bellevue, Nebraska

Emergency in
Space

Scott H. James
Pack 467
Birchcrest Elementary School
Bellevue, Ne.
1977

Bob Smith and Henry Fisher were on a buddy trip for Scouts.

"It's exciting being 70,000 miles from home," said Henry.

"Yes, but I hope we don't get lost, we're quite far from earth," replied Bob.

"Well, if you keep to your driving... What was that?" asked Henry.

"Let's get a look," said Bob.

Henry peered through a telescope. "It's a falling spaceship! Its engine is on fire!" exclaimed Henry.

Luckily Bob got their ship sailing closer but a safe distance from the deadly flames. Henry took a hose and sprayed chemicals at the flames.

"It's not working! The fire's too big!" yelled Henry.

Bob lowered a sharp blade from the left wing and cut off the burning ship's engine. Henry took a parachute connected to a suction cup, slipped it onto his gun, and shot it at the hood of the spaceship.

It worked! The spaceship started to parachute. But the boys didn't notice they were getting deeper into the universe.

Henry bravely took a rope, tied it to his seat, threw it out, put on his oxygen mask, and climbed out. He lowered himself toward the ship, climbed off the door, gave the driver his spare oxygen mask, and then climb the rope to safety.

Bol steered the ship upwards within five feet of Saturn's grounds. The other ship exploded as it hit the ground. Luckily, the Scout Spaceship was far enough away.

Henry used a first-aid kit to patch up the pilot.

Two minutes later they had the pilot at the Venus Hospital.

The two boys earned a badge but they didn't accept any gifts or money offered to them. They had done what they thought was right.

Hero For a Day in Space

Richard Mazza

Pack 888, Covina, California

(pg. 1)

Hero For a Day in Space

The President called me to save an experimental space colony which was having trouble with a hole in its side. He heard I was brave, but also because my weight with the space suit I had to wear was the exact weight needed for the job. I accepted the job, only if I could take my favorite candy bars with me (a mars bar, milky way and starburst + a few). The following morning, I pedaled my bike to the launch site and was prepared for my flight into space. Never having been on a spaceship before I didn't know which end to -

(pg. 2)

Climed into. After my space suit was put on I found myself riding on the biggest elevator in the world even bigger than the Empire State Building. Strapped into my seat I was ready for my journey into space. As brave as I am my teeth were chattering as I heard the count down 5-4-3-2-1-Blast Off. The pressure was so great it felt like the sides of my lips were touching my ears. After a few minutes the pressure stopped so I unbuckled my seat belt but before I knew what was happening I was floating at the top of the rocket. As brave as I am I didn't let that bother me.

(pg. 3)

I finally reached the space colony. And saw the problem right away. I realized the hole was caused by a falling star. At first I couldn't figure how to fix the hole. Then it came up to me! My Starburst taffy. I hooked up my life line and climbed from my space ship (floated) to the hole and gave it a tight with my taffy. Of a sudden I started to fall. I stuck my hand out and grabbed for whatever I could, only to find myself hold on the bed post, as I lie in bed in my bedroom.

THE
By Richard Mazza End

Untitled Story

Craig Pepper
Pack 312, Pinckney, Michigan

craig Pepper

WI-1

On July 21, 2125 the Fire-Streak rocket took its place on the firing pad along the pacific coast in Nevada. As the rocket stopped at the pad, I and two other famous astronauts entered the ship called the Spiker. The countdown was started..... 17-16-15-14-13-12-11-10-9-8-7-6-5-4-3-2-1-0 Ignition, LIFT-OFF!

We were off!

After an hour of travel, we had our main jobs done. Three stages had fallen off with two more to go. I looked at the diskometer and found we were $\frac{1}{2}$ of a light year away from home.

Suddenly, radio activity pulled the Spiker into a huge, cloudy blob. As we were pulled deeper, we were driven a little ways into a dead starry-like planet. Jim, one of the astronauts, opened the hatch and we left in the Spirk, the rocket's mobile. A few feet away, Bert, the other astronaut, saw a lot of small holes. He took the infro camera to take a picture of one. Suddenly one of the other tiny holes started opening and

shebterbin² chemical came sizzling out. Jim turned on the streeftograph³ and found the liquid was a active chemical that comes out in certain conditions. We explored a little more and then returned to the spiker to pull it out. When we were done, I checked the engine plan and made all the possible repairs until all it needed was a chemical to start it. I would have to use the shebterbin, but it was still crude. So I carefully put some in the disomater⁴. Later, I took it and put it in the starter. I was very surprised when it started. I called Jim and Bert and we all left home for Earth.

Glossary

1. Diskometer - A gauge telling how far you are from your home planet.
2. Shebterbin - A chemical very simular to acid and lava. Discovered in 2097.
3. Streeftograph - A machine that gives information on a solid, liquid or gas.
4. Disomater Makes a crude substance pure.
5. Space camera - A camera used in space.

Dear Cousin,

Eric Smith
Pack 716, Farmers Branch, Texas

February 22, 2026

Dear Cousin,

You wanted to know what our new home is like, so here are some of the exciting things that happened the first week.

Our home is dome-shaped, like all the others. Each is connected by a large tube to the Central Energy Transformer (CET). That's where all pollution is removed and energy is changed to a usable form.

For my birthday yesterday, Mother made special arrangements with Central Supply to have enough birthday cake tablets for six of my friends. We also had hamburger and hot dog tablets. What a party!

My big gift was my own rocket backpack. Now I can play with friends in the large clear sphere that surrounds our homes. Sure is lots of fun to zoom around the city instead of just going to the zero-gravity section and floating around. Have you ever thought of playing a game that sits in space instead of on a table?

page 2

These friends are in my new Cub

Scout Den. I'm in Den 3, Pack 716. Each housing area has its own Pack. I am starting my Bear Book, and the first chapter I'm going to work on is space travel. I'll let you know some of the great ideas Dad or I come up with.

Moving here didn't get me out of chores. Once every 12 hours, I must check the control screen to make sure our dome has enough fish water, food tablets, and oxygen. If we need more, I must inform the computer in CET. I'll think of you with shoveling snow and mowing lawns when I need those buttons!

Dad says to dust to transmit, if you're to get this tomorrow, it's into the machine it goes.

Your far-out friend,
Eric

It is Great To Be A Martian

Glenford Van Valkenburg
Pack 37, Saugerties, New York

It is Great To Be A Martian

Have you ever visited Mars? Well if not I will describe to you what a Martian Space Age Family is like.

First there is my Dad. He is Super Dad Glen. He works in the Space Vehicle Factory fixing the "FLUM" mobiles and the Astro Vans. He works from 10 a.m. (10 solar up) to 2 p.m. (2 solar down). His work is easier than on Earth because he has a push button Tool box and an Android Robot helper who squirts grease and oil on demand.

My Mom is "Out of This World". She is a Space Cub Leader. We go on Crater hikes and Space walks and we hope some day we will go to visit an Earth Station. She is a good cook who uses her automatic meal maker every day. She complains about the robot maid and hopes some day they will have push button dust removers. She's always talking on the photophone.

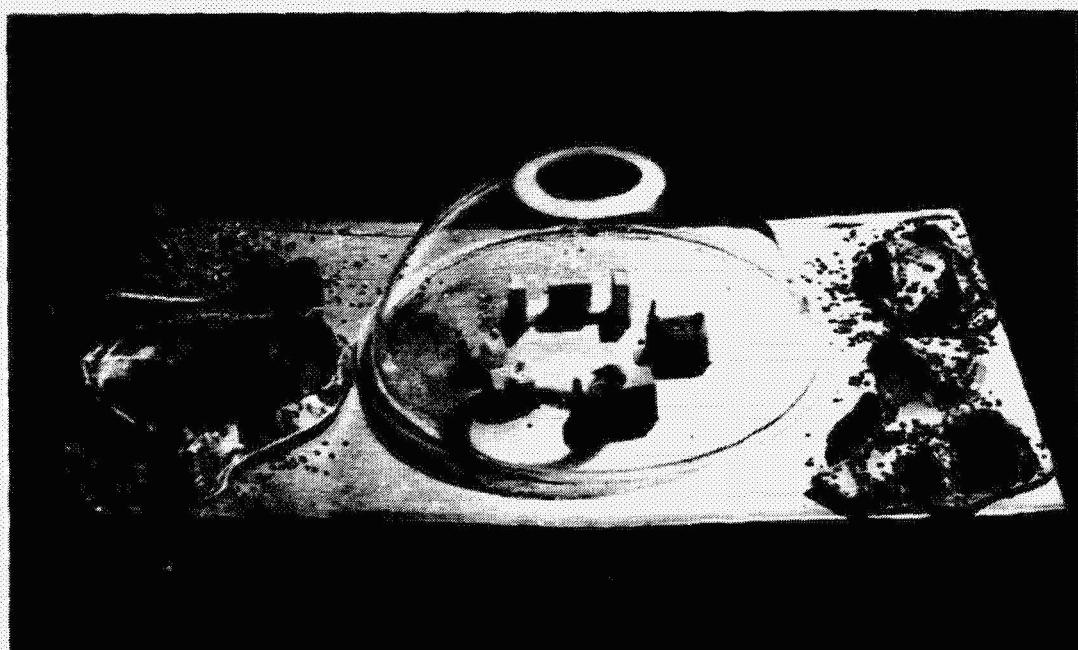
Next is my brother "Satellite Jim". He is a small boy who forgets to wear his space hat and jacket out for his space walk. He goes to school by shuttle bus and his robot teacher shows him how to use the photophone and play gravity ball. Then there is my dog Meteorite Butch. He chases all the "atmosphere eaters" and chews on crater bones. He follows my brother to school on the shuttle bus.

Wow there is me "Lunar Glen". I am a 9 year old space boy. I go to school by rocket rail and enjoy space math and solar health. I like capsule lunches and am a star gravity ball player. I also like to play space hockey. Our team is number one. Someday I hope to visit Earth to see what life is like there. It's really great to be a Martian.

"Glass Dome—To control air inside
Moon City
Round Area—Space Shuttle
Inside Dome—Large BLDG.—Greenhouse
LAB Research
Church
Workers Housing"

Moon Station

Brent R. Earlewine
Pack 17, San Antonio, Texas



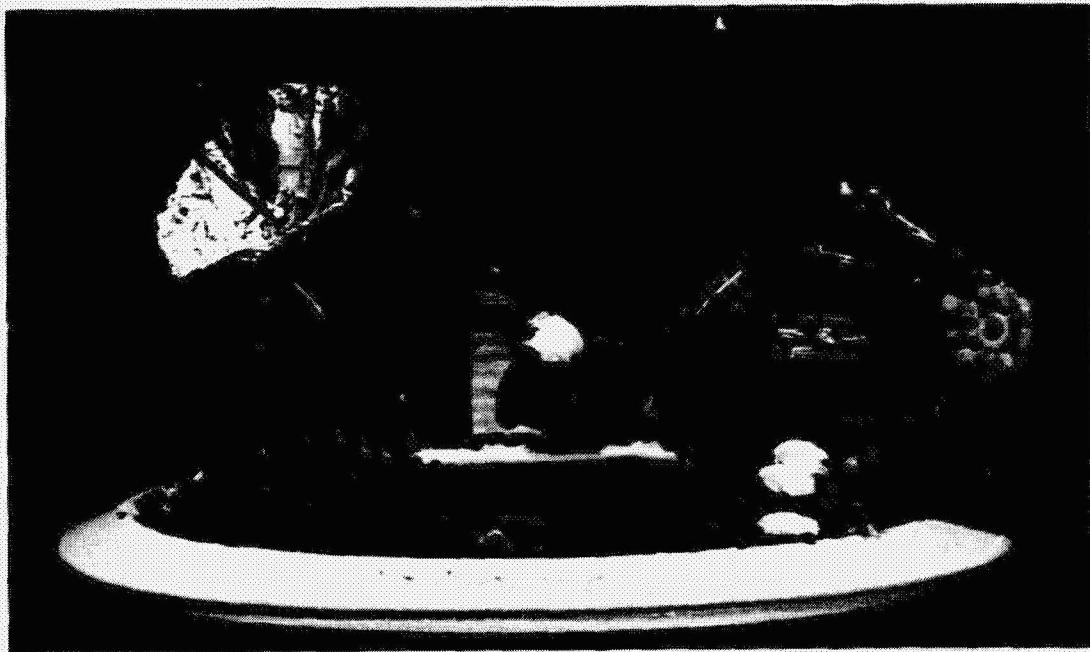
Cubscout Space Travelodge

Daniel Laheru
Pack 322, Brigham City, Utah

"The plastic tent represents a Cubscout Space Travellodge for exhausted space travelers. The grandma travelled from the earth to keep us company. The animals, plants and earthrocks show the harmony on earth, that will make us not lonesome in space.

"The antennae is important for communication with the earth and the other outer space. The cubscout sitting in the rocket indicates the space cubscout readiness to take off into space in case a space traveler has trouble with his spaceship and calls for help.

"The second cubscout is repeating the pledge of allegiance."



"My space city is located on the planet Mars. In my space city I have prefabricated labs and living quarters. They were originally built on Earth, taken apart, then put together on Mars. The domes are for fresh food, water, and recreation. In the middle of the city there is a solar energy collector that powers the city. The city is also a rocket base for space exploration and connection from planet to planet. Under the surface there are streets, shafts, and elevators. For going place to place in the streets you would use an air car that holds 50 to 100 people to a car."

A Space City

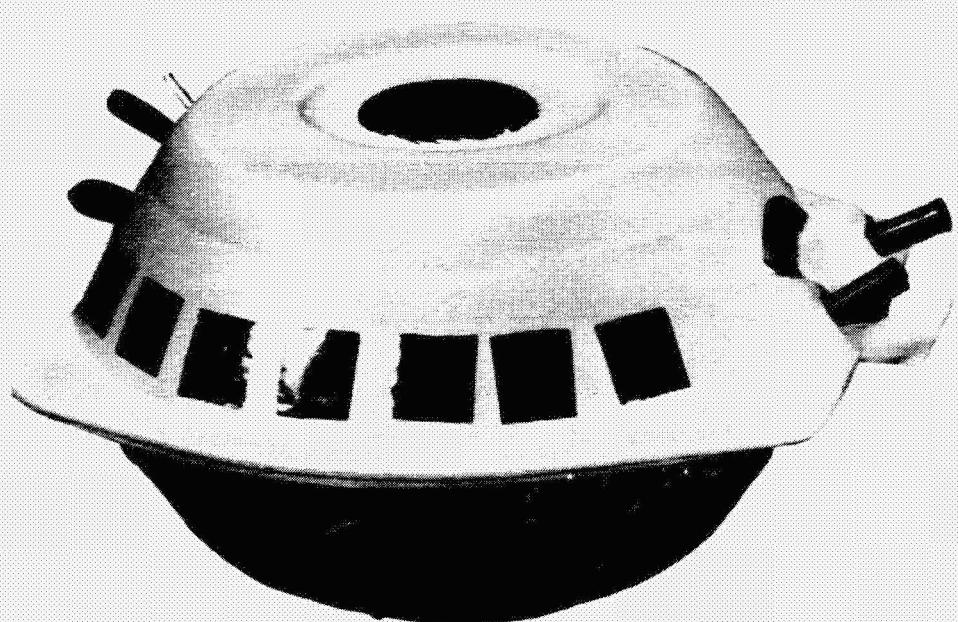
Steven Myers
Pack 3, Granville, Ohio



Space Ship

David Parish
Pack 70, Newcastle, Wyoming

"One Burger King foam container
One Plastic Bottle Cap
Aluminum Contact Paper
One Popsickle mold
Two game pegs
Three Christmas tree bulbs"



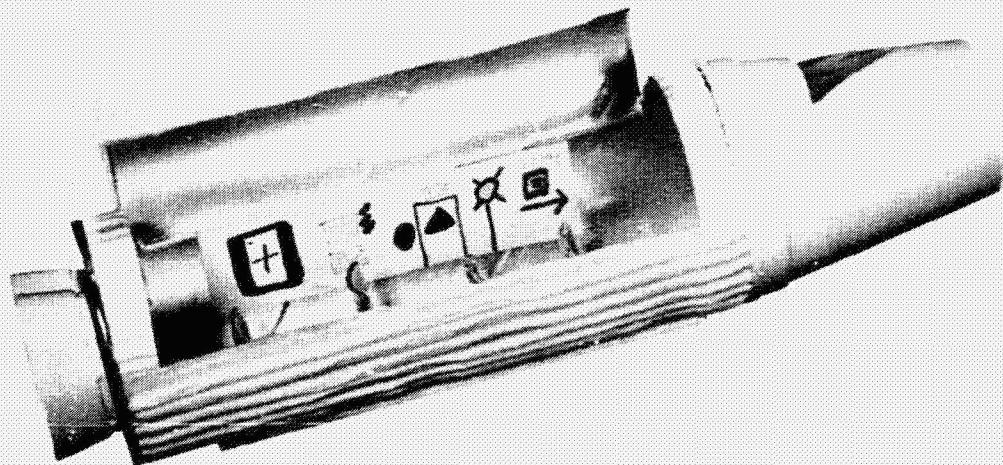
"This model is suppose to be representative of a small space shuttle that will carry people to and from space stations in the future.

"I used a Pringles can for the body of my model, and I used the inside corrugated paper to cover up the can, then I took an eight ounce Solo styrofoam cup and cut a triangle in the side of it. I put Saran Wrap on the inside of the triangle for a window. I attached the cup, or nose cone, to the body of the space shuttle. I used pieces of styrofoam cups for passenger seats and the pilot's seat labeled Captain Kirk. I took two pieces of construction paper and drew symbols representing the inside of a space shuttle. I made the engines from two plastic cups and attached them to the rear of the space shuttle. I made the fuel tanks out of another piece of corrugated paper.

"In the future I think that we will be able to travel at the speed of light but no faster because of certain mathematical laws."

My Space Shuttle

Christopher Plamp
Pack 40, Louisville, Kentucky



S.S. **COLUMBUS**

Raymond Segalini
Pack 127, Valley Cottage, New York

"It is a space shuttle and scientific explorer craft. It is based on a Star Ship, and used to go down on any planet or body, to test for life and such.

"I decided to put the space craft on a stone because a stone makes it stay above the surface. Because of unknown ground, there is a possibility of it sinking below the surface until they explore.

"It was in my cubmasters backyard."



APPENDIX

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APPENDIX

Cub Scout National Winners

Artwork	Written Compositions	Models
Northeast Region		
Henry Guarriello Pack 34, Franklin Lakes, NJ Bergen Council Mr. Fred Schenk, Den Leader	Glenford Van Valkenburg Pack 37, Saugerties, NY Rip Van Winkle Council Mrs. Patricia Van Valkenburg, Den Leader	Raymond Segalini Pack 127, Valley Cottage, NY Rockland County Council Mr. Raymond Segalini, Den Leader
Southeast Region		
Brent Anderson Pack 465, Largo, FL Pinellas Area Council Mr. Alfred Fornianowski, Den Leader	Jeffrey Ccx Pack 153, Bedford, VA Blue Ridge Mountains Council The Rev. Arthur H. Bishop, Den Leader	Christopher Plamp Pack 40, Louisville, KY Old Kentucky Home Council Mr. Charles Estes, Den Leader
East Central Region		
Danny Masterson Pack 112, Westchester, IL West Suburban Council Mrs. Elaine Giannetta, Den Leader	Craig Pepper Pack 312, Pinckney, MI Wolverine Council Mr. Tony Agosta, Den Leader	Steven Myers Pack 3, Granville, OH Licking County Council Mrs. Robert H. Hinebaugh, Den Leader
North Central Region		
Jeff Walth Pack 126, Aberdeen, SD Pheasant Council Mrs. Fran Oland, Den Leader	Scott H. James Pack 467, Bellevue, NB Mid-America Council Mr. Philip D. Head, Den Leader	David Parrish Pack 70, Newcastle, WY Black Hills Area Council Mrs. Janice Whitley, Den Leader
South Central Region		
Carl Lauto Pack 53, New Orleans, LA New Orleans Area Council Mrs. Joyce Lauto, Den Leader	Eric Smith Pack 716, Farmers Branch, TX Circle Ten Council Mrs. Bettie Smith, Den Leader	Brent R. Earlewine Pack 17, San Antonio, TX Alamo Area Council Mrs. Susie Weathers, Den Leader
Western Region		
Geoff Ahmann Pack 604, Scotts Valley, CA Monterey Bay Area Council Mr. Carl Henn, Den Leader	Richard Mazza Pack 888, Covina, CA San Gabriel Valley Council Mr. Richard Mazza, Den Leader	Daniel Laheru Pack 322, Brigham City, UT Lake Bonneville Council Mr. Thomas E. Kallmeyer, Den Leader

**Cub Scout Area Winners
(*National Winners)**

Artwork	Written Compositions	Models
Northeast Region		
Ray Bond Pack 27, Saugerties, NY Rip Van Winkle Council	Jaime Berhalter Pack 303, Tonawanda, NY Greater Niagara Frontier Council	Tommy Daggott Pack 12, Haverhill, MA Lone Tree Council
Gregory Brown Pack 78, Albany, NY Governor Clinton Council	Chris Ford Pack 38, Westport, CT Fairfield County Council	Robert Kelly Pack 62, Toms River, NJ Ocean County Council
*Henry Guarriello Pack 34, Franklin Lakes, NJ Bergen Council	Jay Ryan Pack 283, Ebensburg, PA Penn's Woods Council	James Lack Pack 283, Ebensburg, PA Penn's Woods Council
Michael Harvey Pack 283, Ebensburg, PA Penn's Woods Council	Scott St. Angel Pack 53, Eatontown, NJ Monmouth Council	*Raymond Segalini Pack 127, Valley Cottage, NY Rockland County Council
Gregg Micinilio Pack 32, Bridgeport, CT Fairfield County Council	*Glenford Van Valkenburg Pack 37, Saugerties, NY Rip Van Winkle Council	Scott Waterman Pack 98, Dewitt, NY Hiawatha Council
Southeast Region		
*Brent Anderson Pack 465, Largo, FL Pinellas Area Council	Mike Ballard Pack 74, Berea, KY Blue Grass Council	Andrew Cole Pack 614, Bartow, FL Black Warrior Council
Chris Bryant Pack 19, Dalton, GA Northwest Georgia Council	William Scott Calkins Pack 424, Largo, FL Pinellas Area Council	Chris Davis Pack 150, Blacksburg, VA Blue Ridge Mountains Council
Dave Glenn Pack 55, Vance, SC Central South Carolina Council	*Jeffrey Cox Pack 153, Bedford, VA Blue Ridge Mountains Council	Scott Nunn Pack 400, Columbia, SC Central South Carolina Council
Mark Hamer Pack 55, Memphis, TN Chickasaw Council	Victor Van Wallace Pack 275, Greensboro, NC General Greene Council	*Christopher Plamp Pack 40, Louisville, KY Old Kentucky Home Council
Greg Kennedy Pack 213, Biloxi, MS Pine Burr Area Council		Billy Shaw Pack 499, Hollywood, FL South Florida Council
Barry Mizelle Pack 30, Suffolk, VA Old Dominion Area Council		Mike Smith Pack 919, Atlanta, GA Atlanta Area Council

Artwork	Written Compositions	Models
East Central Region		
Chris Erickson Pack 184, Delaware, OH Central Ohio Council	Paul Dewey Pack 421, Lawrence, IN Crossroads of America Council	Roger Finnell Pack 327, Montgomery, IL Two Rivers Council
Paul Hollo Pack 55, Davidson, MI Tall Pine Council	Frank Garrett Pack 300, Milwaukee, WI Milwaukee County Council	Mike Kinsey Pack 160, Garrett, IN Anthony Wayne Area Council
*Danny Masterson Pack 112, Westchester, IL West Suburban Council	Monte Mugrage Pack 880, Cincinnati, OH Dan Beard Council	*Steven Myers Pack 3, Granville, OH Licking County Council
Jamie Preuss Pack 153, East Roy, WI Potawatomi Area Council	*Craig Pepper Pack 312, Pinckney, MI Wolverine Council	Billy Schell Pack 460, Cleveland, OH Greater Cleveland Council
James E. Schappe, Jr. Pack 490, Wabash, IN Sagamore Council	Patrick Rodden Pack 112, Westchester, IL West Suburban Council	Garrod Tyler Pack 300, Milwaukee, WI Milwaukee County Council
Shawn C. Spera Pack 41, Bay Village, OH Greater Cleveland Council	Richard Smith Pack 390, Akron, OH Great Trail Council	John Wyma Pack 290, Kalamazoo, MI Southwest Michigan Council
North Central Region		
Patrick Johnson Pack 219, Benton, KS Quivira Council	Brian Gerstner Pack 113, Hays, KS Coronado Area Council	Chad Estes Pack 219, Augusta, KS Quivira Council
Greg Liebelt Pack 874, Fort Peck, MT Montana Council	*Scott H. James Pack 467, Bellevue, NB Mid-America Council	Greg Norum Pack 467, Bellevue, NB Mid-America Council
*Jeff Walth Pack 126, Aberdeen, SD Pheasant Council	David Patent Pack 96, Missoula, MT Montana Council	*David Parrish Pack 70, Newcastle, WY Black Hills Area Council

Artwork	Written Compositions	Models
South Central Region		
Ricky Chambers Pack 780, Richardson, TX Circle Ten Council	Michael Pilier Pack 143, Conroe, TX Sam Houston Area Council	Kenny Bellow Pack 55, New Orleans, LA New Orleans Area Council
Martin Guajardo Pack 358, San Antonio, TX Alamo Area Council	*Eric Smith Pack 716, Farmers Branch, TX Circle Ten Council	*Brent R. Earlewine Pack 17, San Antonio, TX Alamo Area Council
Michael Lake Pack 333, Clovis, NM Conquistador Council	Lee Thomas Pack 333, Clovis, NM Conquistador Council	Cody Wheeler Pack 509, Skellytown, TX Adobe Walls Council
*Carl Lauto Pack 53, New Orleans, LA New Orleans Area Council	Jason Blaser Pack 43, Rexburg, ID Teton Peaks Council	
Western Region		
*Geoff Ahmann Pack 604, Scotts Valley, CA Monterey Bay Area Council	*Richard Mazza Pack 888, Covina, CA San Gabriel Valley Council	Kenneth Boitano Pack 39, San Rafael, CA Marin Council
David Blore Pack 139, Glendale, CA Verdugo Hills Council	Steve Susoeff Pack 273, Union City, CA San Francisco Bay Area Council	Mike Halloway Pack 980, Suisun, CA Golden Empire Council
Thad Brenkmann Pack 572, Salt Lake City, UT Great Salt Lake Council	Stacy Talus Pack 895, John Day, OR Blue Mountain Council	*Daniel Laheru Pack 322, Brigham City, UT Lake Bonneville Council
Scott Durein Pack 1015, Alameda, CA Alameda Council	Scott Walden Pack 604, Scotts Valley, CA Monterey Bay Area Council	Tyron N. Sisson Pack 223, Pacific Palisades, CA Great Western Council
Rick Harriman Pack 215, Anchorage, AK Western Alaska Council		

Participating Cub Scout Councils and Packs

Packs in the following local councils participated in the final phases of the NASA project. It was from these packs that the national and area winners were selected.

Grand Totals
249 packs —128 councils

Region	Location	Packs
Northeast		
Fairfield County	Norwalk, CT	32, 38, 52, 68, 73, 79
Katahdin Area	Bangor, ME	55, 154
Great Trails	Dalton, MA	16
Moby Dick	New Bedford, MA	5
Norumbega	Waban, MA	31
Mohegan	Worcester, MA	99
Daniel Webster	Manchester, NH	297, 441
Narragansett	Providence, RI	366
Green Mountain	Essex Junction, VT	530
Lone Tree	Haverhill, MA	12
Governor Clinton	Loudonville, NY	78
Hiawatha	Syracuse, NY	98, 112, 157
Sir William Johnson	Gloversville, NY	40, 55
Greater Niagara Frontier	Buffalo, NY	303
St. Lawrence	Canton, NY	59, 78
Dutchess County	Hyde Park, NY	28, 39, 53, 80, 240
Nassau County	Roslyn, NY	157, 590
Westchester-Putnam	White Plains, NY	99, 132, 266
Suffolk County	Medford, NY	520
Rip Van Winkle	Kingston, NY	37, 135
Bronx	New York, NY	118
Brooklyn	New York, NY	505, 521
Queens	New York, NY	127
Rockland County	Stony Point, NY	127
Direct Service		701
Tamarack	Rutherford, NJ	168
Ocean County	Toms River, NJ	62
Monmouth	Oakhurst, NJ	53
Bergen	River Edge, NJ	16, 34, 92, 185, 245
Thomas A. Edison	Edison, NJ	98, 262
Penn's Woods	Windber, PA	11, 53, 283
Keystone Area	Harrisburg, PA	97
Penn Mountains	Plymouth, PA	166
Philadelphia	Philadelphia, PA	109
Bucks County	Doylestown, PA	170
Totals—35 councils		64 packs

Southeast

National Capital Area	Washington, DC	988, 1182
Baltimore Area	Baltimore, MD	153, 429, 832, 889
Peninsula	Newport News, VA	27, 31, 143, 358, 366
Shenandoah Area	Winchester, VA	83
Blue Ridge Mountains	Roanoke, VA	19, 53, 150, 153, 238, 403
Old Dominion Area	Suffolk, VA	4, 30
Robert E. Lee	Richmond, VA	162, 508, 523
Blue Grass	Lexington, KY	74
Old Kentucky Home	Louisville, KY	40
Chickasaw	Memphis, TN	55

Region	Location	Packs
Daniel Boone	Asheville, NC	306
General Greene	Greensboro, NC	158, 254, 275, 365
Uwharrie	High Point, NC	22
Pee Dee Area	Florence, SC	358
Central South Carolina	Columbia, SC	55, 162, 400
Black Warrior	Tuscaloosa, AL	614
Pine Burr Area	Hattiesburg, MS	213
Chattahoochee	Columbus, GA	300
Atlanta Area	Atlanta, GA	919
Northwest Georgia	Rome, GA	19
Central Florida	Orlando, FL	123, 150
South Florida	Miami, FL	135, 499
Gulf Stream	West Palm Beach, FL	476
Gulf Ridge	Tampa, FL	614
North Florida	Jacksonville, FL	157
Pinellas Area	Seminole, FL	314, 424, 465
Totals—26 councils		51 packs
East Central		
Milwaukee County	Milwaukee, WI	121, 300, 303
Bay Lakes	Menasha, WI	26, 144, 616, 826, 880
Potawatomi Area	Waukesha, WI	58, 153
Wolverine	Ann Arbor, MI	312, 391
Detroit Area	Detroit, MI	323, 341
Tall Pine	Flint, MI	55, 120, 148, 176, 311
Lake Huron Area	Auburn, MI	551
West Michigan Shores	Grand Rapids, MI	300
Southwest Michigan	Kalamazoo, MI	290
Clinton Valley	Pontiac, MI	315
Chicago Area	Chicago, IL	674
Two Rivers	St. Charles, IL	65, 327, 346, 381
West Suburban	La Grange, IL	29, 88, 90, 112, 136
DuPage Area	Wheaton, IL	231
Black Hawk Area	Rockford, IL	329, 418
Northwest Suburban	Arlington Heights, IL	199
Anthony Wayne Area	Ft. Wayne, IN	160
Crossroads of America	Indianapolis, IN	286, 358, 421
Sagamore	Kokomo, IN	490
Great Trail	Akron, OH	109, 120, 339
Buckeye	Canton, OH	5
Greater Cleveland	Cleveland, OH	33, 41, 44, 220, 460, 580
Put-Han-Sen Area	Findlay, OH	314
Dan Beard	Cincinnati, OH	880
Central Ohio	Columbus, OH	90, 125, 184, 247, 415, 493, 656, 779
Licking County	Newark, OH	3, 14, 88
National Trail	Wheeling, WV	149
Totals—27 councils		65 packs

Region	Location	Packs
North Central		
Longs Peak	Greeley, CO	19
Western Colorado	Grand Junction, CO	197
Montana	Great Falls, MT	96, 874
Overland Trails	Grand Island, ND	154
Twin Valley	Mankato, MN	12
Viking	Minneapolis, MN	207, 374, 866
Mid-America	Omaha, NB	467, 483
Pheasant	Huron, SD	126, 151
Black Hills Area	Rapid City, SD	70
Sioux	Sioux Falls, SD	24
Okaw Valley	Belleville, IL	273
Coronado Area	Salina, KS	113
Jay Hawk Area	Topeka, KS	146
Quivira	Wichita, KS	219
Heart of America	Kansas City, KS	244, 258
Ozarks	Springfield, MO	204
Totals—16 councils		22 packs
South Central		
New Orleans Area	Metairie, LA	53
Indian Nations	Tulsa, OK	94
Circle Ten	Dallas, TX	303, 716, 780
Sam Houston Area	Houston, TX	143, 539
Alamo Area	San Antonio, TX	17, 133, 174, 358, 516, 713
Conquistador	Roswell, NM	333
Adobe Walls	Pampa, TX	509
Totals—7 councils		15 packs
Western		
Blue Mountain	Walla Walla, WA	895
Western Alaska	Anchorage, AK	215
Teton Peaks	Idaho Falls, ID	43
Lake Bonneville	Ogden, UT	322
Great Salt Lake	Salt Lake City, UT	572
Monterey Bay Area	Salinas, CA	604
Mt. Lassen Area	Chico, CA	30, 114, 160
Golden Empire	Sacramento, CA	436, 980
Theodore Roosevelt	Phoenix, AZ	263, 356
San Gabriel Valley	Pasadena, CA	458, 888
Inland Empire	Redlands, CA	30
San Diego County	San Diego, CA	295
Great Western	Van Nuys, CA	90, 177, 223, 576
Verdugo Hills	Glendale, CA	131, 139
Alameda	Alameda, CA	19, 29, 244, 1015
San Francisco Bay Area	Oakland, CA	28, 115, 273, 848
Marin	San Rafael, CA	39
Totals—17 councils		32 packs